

CS315-02 Lab Lab06 Analysis Cache Memory

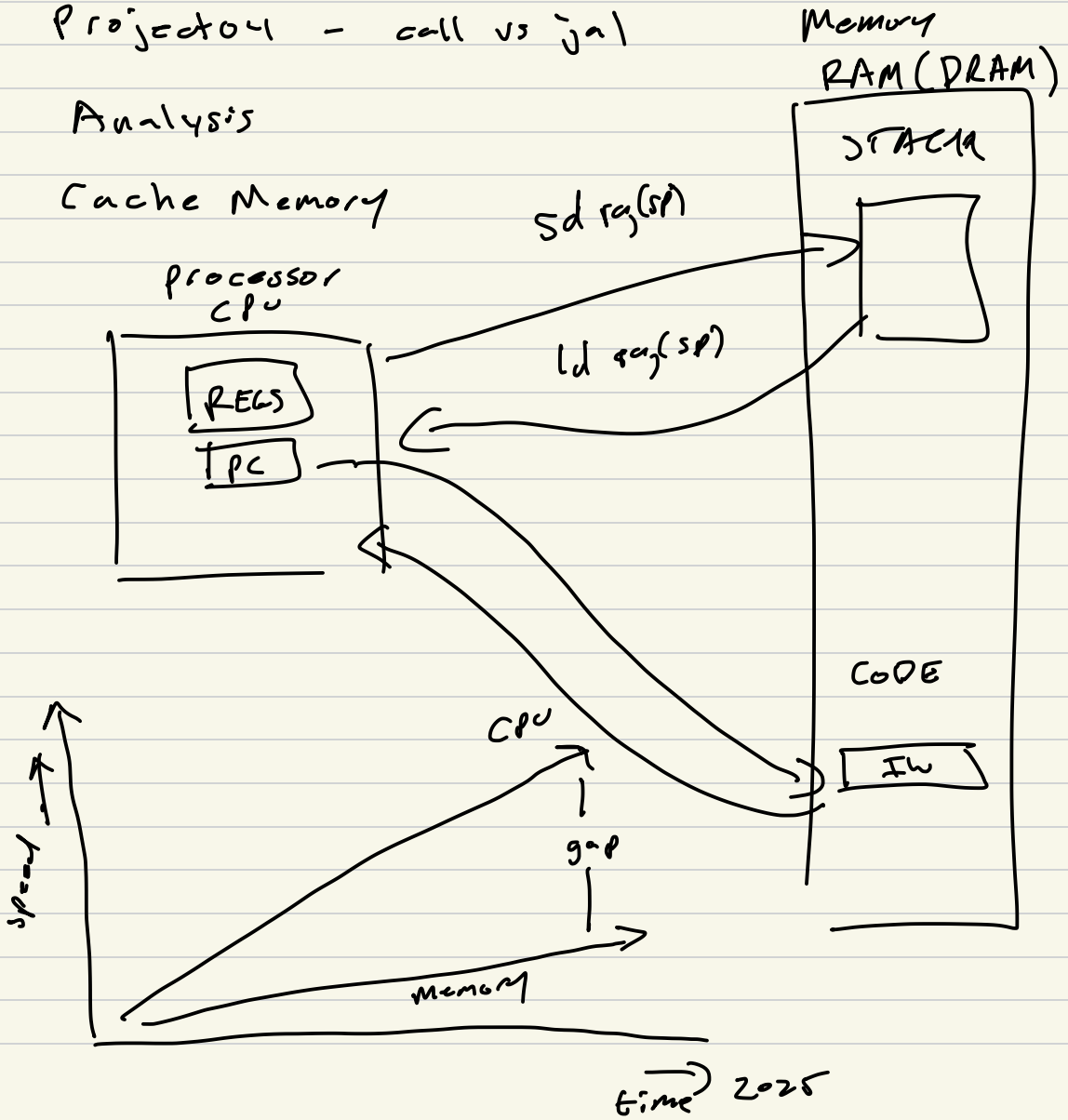
Lab06 Q1A

sign_extend()

Project04 - call vs jal

Analysis

Cache Memory



time 2025

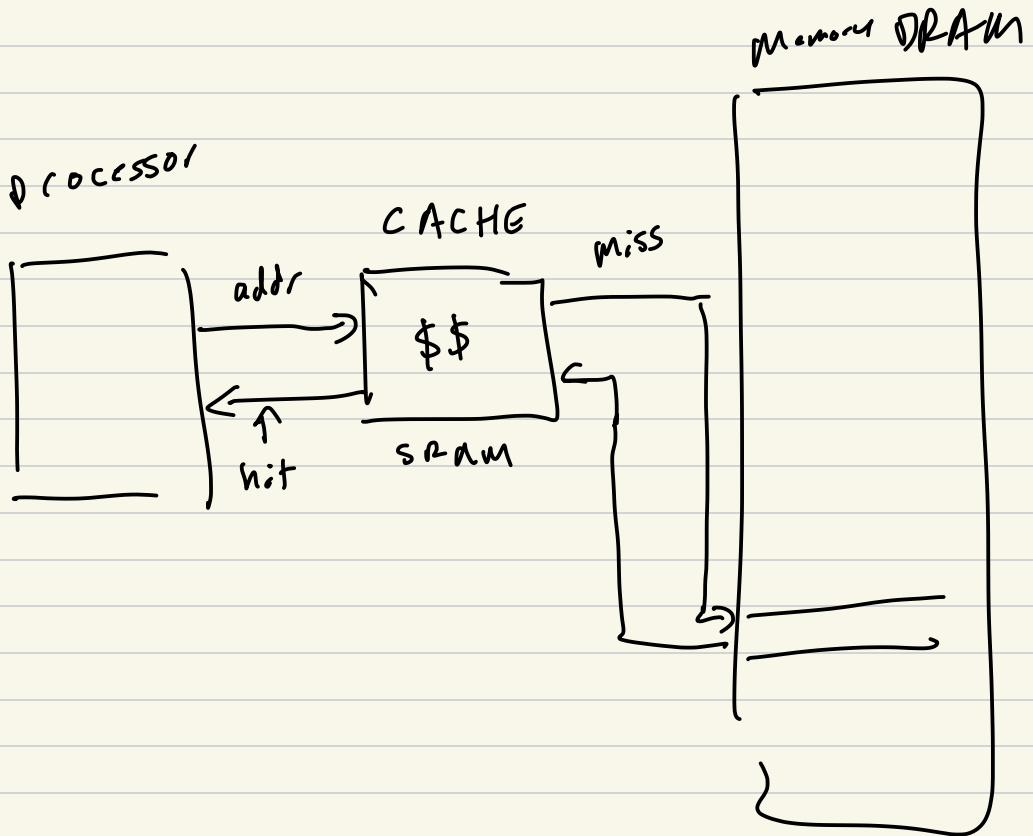
Two types of RAM

SRAM

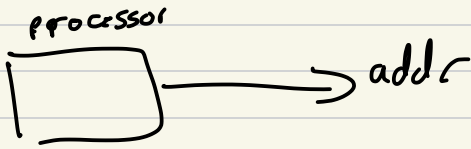
Static
random
access
memory

DRAM

dynamic
random
access
memory



Cache Questions



- 1) How to find $\text{addr}(\text{data})$ in the cache?
- 2) How do we know if $\text{addr}(\text{data})$ are in the cache?
- 3) Which data do we remove from the cache when full?

Principles of Locality

Spatial

temporal

Types of Caches

Direct Mapped Cache

Fully Associative Cache

Set Associative Cache